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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,615	07/19/2000	Hyun Duk Cho	K-190	2166
34610	7590	05/05/2004	EXAMINER KASSA, YOSEF	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			ART UNIT 2625	PAPER NUMBER

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/619,615

Applicant(s)

CHO ET AL.

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Feb. 20, 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 7 is/are allowed.
- 6) ☒ Claim(s) 1,5,8-14,16,17 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-4,15 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Arguments***

1. Applicant's arguments, (page 2-7) filed on 02/20/2004, with respect to claims 1-19 under Nishio et al (U.S. Patent 5,995,666) and Fraser et al (US Patent 5,430,486) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sprague (U.S. Patent 5,699,458) and Kleihorst (U.S. Patent 6,349,154).

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 13, 14, 16, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sprague (5,699,458).

With regard to claim 1, Sprague discloses a first core part that encodes (see Fig. 3, item 304) a moving picture (see Fig. 3, item 302) at a first quantizing value (see Fig. 4 item 408) corresponding to a first display resolution (see col. 5, lines 42-52, that is, subimages or blocks of 8x8 pixels) or encodes a frame unit still picture a VLC that encodes data encoded at the first core part in lengths different from each other (see col. 7, lines 29-39); and an output unit that outputs an encoded bit stream of output data of the VLC (see col. 7, lines 38-44).

With regard to claim 5, Sprague discloses the first core part and the VLC repeatedly encode a single frame data stored in the frame memory (see col. 7, lines 38-49).

With regard to claim 13, Sprague discloses receiving and storing a frame unit of still pictures (see col. 3, lines 35-38); encoding, and transmitting the storing a frame unit of still pictures (see col. 3, lines 43-50); encoding the stored frame unit of still pictures repeatedly until the still pictures have a prescribed resolution (see col. 9, lines 1-18) and transmitting the still picture having the prescribed resolution (see col. 3, lines 34-53).

With regard to claim 14, Sprague discloses the still pictures are stored in a frame memory in a decoder of a picture terminal (see col. 4, lines 12-16).

With regard to claim 16, Sprague discloses the fixed encoding encodes the still picture in an I picture coding (see col. 3, lines 47-53).

With regard to claim 17, Sprague discloses receiving, and storing a still picture frame in the second frame memory of the decoder (see col. 4, lines 7-12); and encoding the still picture frame stored on the second frame memory before transmission (see col. 3, lines 34-41).

With regard to claim 19, Sprague discloses the encoding repeatedly encodes the still picture frame before the transmission (see col. 3, lines 47-53).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprague (U.S. Patent 5,699,458) in view of Kleihorst (U.S. Patent 6,349,154).

With regard to claim 8, Sprague discloses extracting one of a frame unit of still pictures and a moving picture (see col. 5, lines 42-50); encoding one of the extracted still picture and the moving picture (see col. 5, lines 44-52).

Sprague does not explicitly call for transmitting the encoded still picture at a higher resolution than the encoded moving picture. In the same field of endeavor, however, Kleihorst discloses this feature (see col. 1, lines 50-60). At the time of the invention, it would have been obvious to incorporate a high resolution still image processing as taught by Kleihorst in the system of Sprague because Kleihorst provides Sprague's system a step of creating a high resolution still image.

With regard to claim 9, Sprague discloses encoding the extracted still picture in a fixed quantizing value and storing the quantized still picture, and wherein the transmitting comprises transmitting the stored still picture in a still picture transmission mode (see col. 5, lines 47-60).

With regard to claim 10, Sprague discloses the quantized still picture is stored in a frame memory in a decoder of a picture terminal (see col. 4, lines 12-15).

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With regard to claim 11, Sprague discloses the encoding the extracted still picture comprises encoding the still picture in an I picture coding, and wherein the transmitting comprises transmitting the encoded moving picture in a moving picture mode (see col. 5, lines 44-60).

With regard to claim 12, Sprague discloses the encoding comprises repeatedly encoding the extracted still picture until the still pictures have a prescribed resolution (see col. 5, lines 30-35).

***Allowable Subject Matter***

1. Claims 2-4, 15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. Claims 6 and 7 are allowed.

The following is an examiner's statement of reasons for allowance. The closest prior art of record failed to teach or suggest, controls a data flow according to the moving picture mode or the still picture mode to store the still picture to be transmitted in the still picture mode to the decoding frame memory, and performs control for repeated encoding of the still picture frame, a first multiplexer and second multiplexer that selects either one from the moving picture frame and the still picture frame stored in the decoding frame memory to forward to the encoding core part under the control of the controller frame and in combination with all the other limitations in the claims 6 and 7, claims 6 and 7 are allowable.

***Other Prior Art Cited***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6,587,505) to Nozawa et al discloses image processing apparatus and method.

US Patent No. (6,625,216) to Zhu discloses motion estimation using orthogonal transform-domain block matching.

US Patent No. (5,270,813) to Puri et al discloses spatially scalable video coding...

US Patent No. (5,504,530) to Obikane et al discloses apparatus and method for coding and decoding image signals.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703)

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872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

**PATENT EXAMINER**

Yosef Kassa

04/28/04.

  
BHAVESH M. MENTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600